Organic Chemistry I Laboratory (3220.001)

Instructor Contact: Sreekarbabu.marpu@unt.edu

Name Dr. Sreekar Babu. Marpu Office Location: CHEM 371 Phone Number: 940-565-4850

Office Hours: Monday- 10.00 am to 11.00 am

Zoom Meeting ID: https://unt.zoom.us/j/83145661605

Email: sreekarbabu.marpu@unt.edu

Note: Please take the time to read the entire syllabus document, course policies are described in this document, Canvas modules will contain all the information required to complete the online labs.

Laboratory Coordinator - Dr. Charles Browning (charles.browning@unt.edu) and Teaching Assistants (TBA). The TA is primarily responsible for conducting the laboratory, working with the students, and helping them with remote/online labs. The TA is responsible for grading and should be the first point of contact for grading, and course contents. TA's contact information will be available on Canvas during the first week of the semester.

Laboratory Teaching Assistants (Tentative)

Section	Time (T, W, R)	RM for In-Person	TA	TA's Contact
		Lab		
301	8.00 to 10.50 am	CHEM 241		
302	8.00 to 10.50 am	CHEM 243		
303	1.30 to 4.20 pm	CHEM 241		
304	1.30 to 4.20 pm	CHEM 243		
305	4.30 to 7.20 pm	CHEM 241		
306	4.30 to 7.20 pm	CHEM 243		
307	9.00 to 11.50 am	FULLY REMOTE		
308	9.00 to 11.50 am	FULLY REMOTE		

NOTE: Sections 301 to 306 will attend two in-person labs during the entire semester. Below is the arrangement for in-person labs. For in person labs (during 2nd and 4th weeks), students will perform two experiments in one day. The experiment day will be decided by the TA. Sections 307 and 308 are fully remote, no in-person labs. Irrespective of the laboratory section, Prelabs are not required for online/remote labs.

Dates	Section 301 8.00 to 11.00	Section 302 8.00 to 11.00	Section 303 1.30 to 4.20	Section 304 1.30 to 4.20	Section 305 4.30 to 7.20	Section 306 4.30 to 7.20	Room	Experiments List
Week of July 5 th	NO IN-PERSON LABS/ All activities are REMOTE					Lab Safety, Experiment 1 (Oxidation) – 2 days only		
Week of July 12 th	DA/EAS		DA/EAS		DA/EAS		241	Grignard, Diels Alder, EAS.
		DA/EAS		DA/EAS		DA/EAS	243	One day in person, one day remote activity (2 days only)
Week of July 19 th		NO I	N-PERSON LABS	6/ All activities a	re REMOTE			FC, Soap, Dye (2 days remote activity)
Week of	Aldol/Aspirin		Aldol/Aspirin		Aldol/Aspirin		241	Aldol, Aspirin,
July 26 th		Aldol/Aspirin		Aldol/Aspirin		Aldol/Aspirin	243	Unknown One day in person, one day remote activity (2 days only)
Week of August 2 nd		NO STUDENT	ACTIVITES/ TA's	s working on fin	al grades.			

Communication Expectations: Any questions, please email the TA. The students can expect a response from the TA in less than 48 hours during the weekdays. The students are expected to reach out to TA's well in advance for reporting an absence to the meetings or for arranging a late submission of reports. The TA's will try to respond at the earliest to the emergency notifications. Everyone is welcome to reach out to the instructor as needed.

Important Note: Late Reports without acceptable excuse notes and/or without prior permission from the TA's/instructor will incur penalties up to 10 points.

If you are experiencing any symptoms of COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance (zoom meetings) is an important part of succeeding in this class, your health, and those of others in the community, are more important. During the quarantine period, the students are required to finish the labs online and submit the reports for full points. The message from the Dean of Students will serve as an excuse note. So please reach out to the UNT hotline and report your absence related to COVID exposure. Please report any suspected COVID exposure or symptoms to the COVID hotline immediately (844-366-5892 or email COVID@unt.edu).

Welcome to UNT!

As members of the UNT community, we have all committed to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation. UNT's full Non-Discrimination Policy can be found in the UNT Policies section of the syllabus.

Course Description

Lab lecture (completely online) and 3-hours laboratory (remote delivery)

This course is designed to introduce students to some well-known and popular organic synthesis reactions. Organic techniques practiced during 3210 course will become handy while performing these organic reactions in the laboratory. The experiments will focus on synthesis, characterization, and purification aspects. Selective Organic Synthesis reactions include – Oxidation, Grignard synthesis, Diels-Alder Reaction, Friedel-Crafts Acylation, Electrophilic Aromatic Substitution Reactions, Saponification, Diazonium coupling reaction, and structure assignment based on FTIR and NMR spectral analysis.

Prerequisite(s): "C" or better in CHEM 3210.

Core Requisite(s): CHEM 2380 or completed prior with a "C" or better

The course covers organic II laboratory experiments. The syllabus is designed to provide hands-on laboratory experience with selective organic synthesis techniques and reactions incongruent with the ongoing CHEM 2380 course. The main objective of the course is to cement the knowledge and practical understanding of theoretical techniques discussed and taught in various chapters of the ongoing CHEM 2380 course. The laboratory experiment sequence is designed to overlap with 2380 teaching content. The experiments are planned and implemented on a microscale considering lab duration and safety parameters.

Course Prerequisites or Other Restrictions

Please check the course requirements at https://registrar.unt.edu/sites/default/files/feeds/registrar course reports/fall/chemistry fall.pdf or reach out to chem-advising@unt.edu for additional information if required.

Must have had or be concurrently registered in chem 2380. Must also be enrolled in CHEM 3220.001. Must also be enrolled in any chem 3220.3XX lab section. This is an internet course. Course enrollment is restricted and non-texas resident students residing outside of the state are not eligible to enroll in this section. Contact the department for enrollment assistance in an appropriate section of the course if applicable. In Summer 2021 (5 week 2) all laboratory sections are required to meet in person for finishing in-person experiment, see the list above (contact your TA or the instructor if needed). The remaining activities are performed online.

Course Structure

Contains 4 weekly modules. There will be no synchronous meetings with the instructor (NO LAB LECTURES). Full course material is available on Canvas. During office hours, the instructor will be available to address students general questions and experiment related questions, office hour meetings are not mandatory. The syllabus includes 9 laboratory experiments, one unknown assignment, one makeup lab (interactive assignment or a quiz), and 2 quizzes. See the detailed breakdown in the below sections. The make-up assignment is an online interactive module, students with accessibility issues can opt for a quiz with similar content. Among 9 laboratory experiments, 4 experiments are scheduled to be in-person and remaining part of the course is performed online (remotely) using online demo videos and material on Canvas. Lab reports are required for 9 experiments. The zoom meeting with the TA during the scheduled lab time is MANDATORY.

Every student is required to follow the due dates unless an excuse has been granted by the TA/instructor. Excuse note needs to be submitted to the TA within 24 hours of the absence to the zoom meeting, excuse notes for late submission of the reports/quizzes needs to be submitted within 24 hours. Students are required to obtain prior permission from the TA/instructor for late submission of the reports/quizzes. If you have any questions or unsure about anything, DO NOT HESITATE TO ASK!!! Very important that you are aware of everything listed in this syllabus document. We are looking forward to sharing our knowledge and experience to facilitate a unique and the best laboratory teaching experience for every student enrolled in the 3220 course. I know that you will bring experience and insight into lab activities, the student's feedback is highly recommended. We are truly looking forward to this course this semester!

Attend the zoom meeting with the TA, it is highly recommended to watch the videos before the meeting to discuss questions during the meeting with the TA. Ensure all questions related to the video (experiment objective, procedure, observations/data, and conclusions) are addressed and in good position to prepare the report. Follow the deadlines and submit the reports on time. Lab reports can be word/pdf format. Pictures of the reports will not be accepted. The online lab report should contain all items, check lab report help documents (Module 1). Answer the prelab, postlab, and bonus questions, write the questions for full points. Reach out to your TA for any questions regarding the video or the data.

NOTE: TA's will use plagiarism or copy check software, DO NOT COPY, check the "Academic Integrity" policy carefully. A sample of prelab and full lab reports are available in the weekly 1 module on Canvas. During the first week of the laboratory, the safety and lab report items will be discussed extensively by your TA. Please do not miss the meeting with your TA during the first week of the labs.

NOTE: Students are not responsible for answering the questions in the demo videos, students are required only to answer prelab and postlab questions. 3220.001 platform is only for the instructor to reach out to the entire class. Unless notified, do not upload any report(s) or quiz on to 3220.001 platform. Individual sections (3220.3XX) will contain handouts, presentations, zoom recordings, and other information required for performing the experiments and for writing prelabs/ lab reports. Please check with your TA if you do not find any required information. STUDENTS ARE NOT RESPONSIBLE FOR ANY ACTIVITIES ON 3220.001 PLATFORM UNLESS MENTIONED BY YOUR TA.

How to get through the first week of labs

Steps	Actions		
1	Check your enrollment, confirm your lab section, and lab time (synchronous zoom meeting with the TA)		
2	Check syllabus document, and understand guidelines and rules, know your TA (name and contact info) – check		
	3220.001 course on Canvas and watch for announcements from the instructor. Feel free to reach out to your TA		
	or the instructor for any additional questions.		
3	Know the items that needs to be finished during week#1 module -check Canvas.		
4	Out of 9 experiment, 4 experiments are scheduled to be "In-Person" this semester.		
5	Synchronous zoom meetings – Your TA will discuss the experiment during the zoom meeting, the meetings are		
	conducted exclusively during the day/time as indicated in the schedule. Absence to the zoom meetings without		
	prior and proper excuse will result in penalty.		
6			

Course Objectives

Upon successful completion of this course, students will be able to

- 1. Recognize the key aspects of online learning and evaluate the differences between in-person and online teachings for laboratory courses.
- 2. Identify different equipment, special glassware commonly used in the organic chemistry laboratory, and handle them safely and effectively.
- 3. Demonstrate the ability to work safely in the organic laboratory bench and hood spaces.
- 4. Review and follow safe laboratory practices in an organic lab setting. Includes safe disposal and handling of different organic chemicals.

- 5. Apply selective theoretical concepts covered in CHEM 2380 or equivalent organic course in a laboratory setting.
- 6. Operate at least five organic synthesis reactions, oxidation, Diels-Alder, Grignard synthesis, Electrophilic Aromatic Substitution, Friedel-Crafts Acylation, Aldol Condensation, Saponification, Diazonium coupling, and Aspirin synthesis in an organic lab setting.
- 7. Apply melting point, recrystallization, thin-layer chromatography, distillation, and extraction techniques practiced during 3210 labs for finishing the organic synthesis reactions.
- 8. Handle organic synthesis reactions in the organic lab setting following a written experimental procedure. In the laboratory, able to work individually or within a team to complete the experiment, collect and analyze the data.
- 9. Create a standard and legitimate scientific lab report using data generated in the organic lab setting.
- 10. Predict and apply fundamental organic chemistry laboratory skills and techniques for advanced courses in chemistry and other branches of life sciences.
- 11. Adapt good laboratory practices to all compliance items (laboratory work and lab reports)

Materials

Recommended Reading: "Macroscale and Microscale Organic Experiments," 6th or 7th Edition by Kenneth L. Williamson and Katherine M. Masters. Refer to CHEM 2380 course material for additional information. Any format (used, electronic, or pdf version) of the textbook is acceptable for the course.

All the information required to perform the experiments is available on Canvas. Information required for writing the lab reports, and prelab/postlab questions is available in weekly modules. Any additional information can be obtained from open, online resources. Please reach out to your TA if you have additional questions. The instructor has taken every care to update the course content, however the zoom lecture recordings from previous semesters are used as is, please ignore the mismatching information (week#, experiment#) in the zoom lecture recordings. The content remains the same. If you have questions, please reach out to the TA or the instructor.

Lab Reports: All experiments, except for week#1 (safety) module and unknown assignment requires lab report submission for a full grade.

Quizzes and makeup assignment does not require a lab report. Please refer to the Week#1 module on Canvas for sample lab reports. Please talk to your section TA for – acceptable submission format, file type, etc.

Lab Recitation and Materials

The lab recitation for this lab is completely online. All lectures (PowerPoint presentations) are arranged in the form of weekly learning modules. Each module includes an experiment presentation, handout, video, and zoom lecture recording. The zoom lecture recording will contain bonus points and explanations to prelab and postlab questions. The video demonstrations will provide information for setting up the experiment, usage of the glassware, and other items in the laboratory. Some of the zoom video recordings will contain bonus points. The handouts will contain the experimental protocol, please use the handouts *only as a reference source*. For online labs, the information from the video demonstration is used for preparing the lab report. The experiment procedure for the online labs needs to be written based on narration from

the demo video. The demo videos will also contain observations and data for the online reports. Any questions related to the video needs to be addressed during the TA meeting. The quizzes will be published on Canvas following the schedule in the syllabus. Please follow the due dates for the submission of lab reports and quizzes. Do not expect any partial credit for late submission unless prearranged with the TA. Any unexcused absences to the TA meetings (zoom meetings) will result in a penalty! The meetings are going to be short.

Teaching Philosophy

The course covers organic I laboratory experiments. The syllabus is designed to provide hands-on laboratory experience with selective organic synthesis techniques and reactions incongruent with the ongoing CHEM 2380 course. The main objective of the course is to cement the knowledge and practical understanding of theoretical techniques discussed and taught in various chapters of the CHEM 2380 course. The laboratory experiment sequence is designed to overlap with 2380 teaching content. Understanding the concepts of CHEM 2380 teachings is very important for getting the best from the 3220 labs.

Technical Requirements & Skills

Minimum Technology Requirements

Provide a list of the minimum technology requirements for students, such as:

- Computer
- Reliable internet access
- Speakers
- Microphone
- Plug-ins
- Microsoft Office Suite
- <u>Canvas Technical Requirements</u> (https://clear.unt.edu/supported-technologies/canvas/requirements)

Computer Skills & Digital Literacy

Provide a list of course-specific technical skills learners must have to succeed in the course, such as:

- Using Canvas
- Using email with attachments
- Downloading and installing software
- Using spreadsheet programs
- Using presentation and graphics programs

Using MS Word and PDF documents

Technical Assistance

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT, we have a Student Help Desk that you can contact for help with Canvas or other technical issues.

UIT Help Desk: http://www.unt.edu/helpdesk/index.htm

Email: helpdesk@unt.edu
Phone: 940-565-2324

In-Person: Sage Hall, Room 130 Walk-In Availability: 8 am-9 pm

Telephone Availability:

• Sunday: noon-midnight

Monday-Thursday: 8 am-midnight

Friday: 8am-8pmSaturday: 9am-5pmLaptop Checkout: 8am-7pm

For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors online.

- Treat your instructor and classmates with respect in email or any other communication.
- Always use your professors' proper title: Dr. or Prof., or if in doubt use Mr. or Ms.
- Unless specifically invited, don't refer to your instructor by the first name.
- Use clear and concise language in the lab reports.
- Remember that all college-level communication should have correct spelling and grammar (this includes discussion boards).
- Avoid slang terms such as "wassup?" and texting abbreviations such as "u" instead of "you."
- Use standard fonts such as Ariel, Calibri, or Times New Roman and use a size 10 or 12 point font
- Avoid using the caps lock feature AS IT CAN BE INTERPRETED AS YELLING.
- Limit and possibly avoid the use of emoticons like :) or ©.

- Be cautious when using humor or sarcasm as the tone is sometimes lost in an email or discussion post and your message might be taken seriously or sound offensive.
- Be careful with personal information (both yours and others).
- Do not send confidential information via e-mail
- Any profanity in the lab reports will not be excused will result in zero. Contact the instructor for any questions.

See these Engagement Guidelines (https://clear.unt.edu/online-communication-tips) for more information.

Course Requirements

Assignment	Points Possible	Percentage
2 Quizzes. Quiz # 1: Safety quiz mandatory. Quiz # 2: questions are based on experiments covered in the syllabus	40 points	22.22 %
9 Lab Reports + unknown assignment	200 points	74.07%
1 Make-up Assignment (Interactive Module or equivalent Quiz depending on accessibility)	20 points	
TA Assessment	10 points	3.7%
Total Points Possible	250 points	100%
*Includes 25 bonus points.		

^{*}Bonus points are the instructor's discretion. Watch recorded zoom meetings for bonus questions.

Weekly	Remote Delivery (T, W, R)	Experiment Information (page numbers from Organic	Submission Due Date
Modules		Manual, Ed 6/7)	
Week #1	Experiment 0: Safety	Safety items and lab report help documents. Refer	July 12 th - before
		to Module #1. Safety quiz #1 is required.	12.00 pm
Week of July	Unknown Assignment –	Refer to module X on Canvas. Refer to Chapter 2 for	
5 th	Spectral Analysis	FTIR and Chapter 9 for NMR analysis	
	Experiment 1 – Cyclohexanone	Cyclohexanone from cyclohexanol	
	from cyclohexanol (oxidation)	Williamson, Ch. 22	
		22.3: Cyclohexanone	
		Tests: 2,4-DNP test and oxidation of alcohols	

		p.361-363 / p.363-365.	
Week #2 Week of July 12 th	Experiment 2 – Grignard Synthesis	 38.1: Phenyl magnesium bromide; 38.3: Benzoic acid. pp. 495-497/498-500 and pp. 500/503 	July 19 th - before 12.00 pm
	Experiment 3 – Diels-Alder Reaction	• 48.2: Reaction with Maleic anhydride pp. 623-624/625-626	
	Experiment 4 – Electrophilic Aromatic Substitution Reaction	• 28.1: Nitration of methyl benzoate pp. 402-403/405-406	
Week #3 Week of July 19 th	Experiment 5 – Friedel-Crafts Acylation of Ferrocene	32.1: Acetyl Ferrocene Column Chromatography pp. 440-441/443-444	July 26 th - before 12.00 pm
	Experiment 6 –Esterification and Hydrolysis	• 40.5: The preparation of Soap pp. 525-526/527-528	
	Experiment 7 – Dyes and Dyeing, Coupling of Diazonium Compounds.	 46.1: Diazotization of Sulfanilic Acid pp. 592/594 46.4: Methyl Orange. pp. 596/598. 	
Week #4 Week of July	Experiment 8 –Aldol Condensation (Synthesis of Dibenzalacetone)	• 37.1: Synthesis of Dibenzalacetone pp. 485-486/ 488-489	August 2nd- before 12.00 pm
26th		41.1: Synthesis of Acetylsalicylic acid	

	Experiment 9 – Acetylsalicylic acid (Aspirin)	pp. 531-532/ 533-534	
	Quiz # 2 Makeup Module	 Quiz#2 will be open during week #4. Will cover exclusively questions based on 9 experiments. A Labster Simulation or an Equivalent Quiz (will replace the lowest grade or an unsubmitted/late report) 	
Week #5	NO ACTIVITY		TA's will post the final grades on Canvas
Week of			on/before August
August 2nd			3rd.

Important Note: Late Reports without acceptable excuse notes and/or without prior permission from the TA's/instructor will incur penalties up to 10 points.

Zoom meetings with the TA is mandatory. The makeup assignment can replace the lowest grade or can be used for filling missed lab report. Quiz #2 is mandatory! Quiz 2 and makeup assignment will be made available as per the syllabus dates.

Please look at the https://registrar.unt.edu/registration/fall-registration-guide for UNT deadlines. Classes Begin July 5th; Last Day: August 6th; Final exams: August 6th; University grade submission: August 9th before 4.00pm.

Laboratory Experiment (remote/ online)	Short Description and Objectives	
Safety and guidelines	Students are required to review the safety rules document. Review the safety materials, finish the safety quiz, and send it over to the TA. Review the syllabus, "lab report help" documents, and get ready for the first in-person lab the following week. Able to acquire skills to write a lab report. Able to practice safety guidelines in the organic laboratory. Everything is done online. Please check the Canvas weekly modules.	
Identification of Unknown	The handout contains a molecular formula, Infrared Spectrum and Nuclear Magnetic Spectrum of an unknown organic molecule. The students are required to identify the molecule and draw the structure from the given information. Everything is done online.	

Synthesis of Cyclohexanone from cyclohexanol Tests: 2,4-DNP test and oxidation of alcohols.	The lab will allow for the synthesis of cyclohexanone from cyclohexanol. Conversion of secondary alcohol into ketone using a household oxidizing agent will be performed in the lab. The lab will facilitate the identification of organic compounds by using simple-common organic reagents. Everything is done online.
Grignard Synthesis	The significance of Grignard reagent and Grignard reaction will be demonstrated. Starting from phenyl magnesium bromide, the Grignard reagent will be in situ synthesized in step one. In step two the assynthesized Grignard reagent will be utilized to synthesize an aromatic compound (benzoic acid). Everything is done online.
Diels Alder Reaction	The objective is to synthesize a six-membered ring starting from a combination of a diene and dienophile. The lab lecture will emphasize on the mechanism of formation of the six-membered rings and the stereochemistry associated with the reaction. This is in-person lab.
Electrophilic Aromatic Substitution	Synthesis of an electrophilic substitution product is taught in the lab. Mechanism and chemistry associated with electrophilic substitution reactions are emphasized in the lab lecture. The students will perform nitration of methyl benzoate in the lab. This is in-person lab.
Friedel-Crafts Acylation of Ferrocene	Synthesis of acetylferrocene from ferrocene, followed by purification of acetylferrocene. The labs will demonstrate the utility of the HPLC technique for the purification of organic compounds from a mixture during an organic reaction. Everything is done online.
Esterification and Hydrolysis (preparation of soap)	The students will have an opportunity to synthesize soap starting from a fatty acid. The as-synthesized soap will be tested for its hardness. Everything is done online.
Dyes and Dyeing: The coupling of diazonium compounds	The lab will provide an opportunity for the students to learn the synthesis of a pH sensitive dye/indicator by following a multi-step organic synthesis procedure. Methyl Orange (MO) will be synthesized starting from sulfanilic acid. The MO will be used for dyeing the fabric. Everything is done online.
Aldol Condensation.	An Aldol product (Dibenzalacetone) will be synthesized starting from Benzaldehyde. The reaction will explain the significance of molar ratios of starting materials in the organic synthesis reactions. This is in-person lab.
Synthesis of Acetylsalicylic acid (Aspirin)	A very famous pain killer, Aspirin (acetylsalicylic acid) will be synthesized starting from salicylic acid. This is in-person lab.
Labster Assignment or a Similar Assignment (Interactive Module or a Quiz Assignment Depending on Accessibility)	This is a make-up lab. The makeup lab is performed for two reasons – one for replacing a lowest lab grade or for making up an absent lab. The students are required to perform this assignment using the Labster interactive software program, if unable to access the Labster, can answer a quiz that contains similar content. The students will be provided the link and information to access the Labster to finish the assignment or the students will get a quiz copy. Everything is done online.

Grading

Total Points 250

- 10 Experiments (in person + online) = 10* 20 = 200 points
- 2 guizzes = (2*20) = 40 points
- = 1* 10 = 10 points TA assessment
- 1 Make-up assignment (Interactive or an equivalent quiz) = 1*20 = 20 points
- Total = 250 Points

20 bonus points - 15 from zoom recordings (presentations of the experiment) for bonus questions. Additional, **5 bonus points** for TA SPOT evaluation.

Include the grading scale (A-F) along with the point totals/percentages you will use to calculate the final grade. For example:

- A: 90-100%
- B: 80-89%
- C: 70-79%
- D: 60-69%
- F: 59 and below
- The grades are finalized by the TA's following the guidelines outlined in the syllabus. The participation and activities in the lab help.
- LAB REPORT SUBMISSION IS REQUIRED even for excused absences. NO LAB REPORT, NO GRADE.

LAB REPORT POINTS DISTRIBUTION: Look into Sample Lab Reports for full details in Week#1 module.

Objective/Summary, Procedure, prelab and post-lab questions: 10 p

Observations, Data & Results: 7P Conclusions: 3P

Turnaround Time

The turnaround time for weekly experiments are detailed below in the table. The full lab report containing all information (check lab report help documents) should be submitted on/before the due date. The lab reports can be submitted in person or online depending on the arrangement with the TA. The graded lab reports will be turned back to the students within 2-3 days of submission. When this is not possible, the TA's will send an announcement to the class. The TA's will provide feedback for the first report, highlighting the missing items without any penalty. From the second report onwards, the students are required to follow the feedback and finish the reports for full points. Please check the syllabus for submission deadlines. Talk to your TA if you have any questions. Be prepared to lose up to 10 points for late submissions unless prearranged with your TA.

Late Work

Late reports will not be accepted unless the student encounters an emergency or extreme situation. All work turned in after the deadline will receive a grade of zero unless the student has a university-excused absence and provides documentation with 72 hours of the missed deadline. Do not expect any partial credit for the late reports unless prearranged with the TA.

Extra Credit

The course will include 25 bonus points. 16 bonus points are available in the zoom lab lecture recordings, 4 bonus points for cleanliness/safety practices in the lab, and 5 points for SPOT evaluation. For lab lecture bonus questions, please type/write the question and your response very clearly for full points.

Course Evaluation

Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. To help with grading, the students are advised to finish their SPOT for their section before submitting their final lab report for 5 bonus points. Send the confirmation of SPOT to your TA for 5 bonus points.

Course Policies

Safety Policy (not required for remote/online labs)

The University of North Texas places the utmost importance on maintaining a safe learning environment for students and employees. To prevent injury, damage, or other harm, all UNT students must always follow the following laboratory safety rules: Please follow the social distancing guidelines outlined by UNT and CHEM department, talk to your TA if you have concerns about your safety and/or health.

Please review and sign the safety rules agreement (available on Canvas) and upload it before your first in-person lab. Students cannot start working in the labs without signing the safety rules agreement. The safety rules agreement will also include social distancing policies that every student and TA/instructor are required to follow in the lab. Finish the Safety quiz (Quiz #1) and submit it to your TA before the first lab. Cannot start with other experiments unless the safety quiz is submitted. Be punctual to the TA meetings. Please arrange with your TA for an excused absence

Attendance Policy

Visit the University of North Texas' Attendance Policy (http://policy.unt.edu/policy/15-2-) to learn more. Excused Absences: An absence may be excused for the following reasons: 1. religious holy day, including travel for that purpose; 2. active military service, including travel for that purpose; 3. participation in an official university function; 4. illness or other extenuating circumstances; 5. pregnancy and

parenting under Title IX; and 6. when the University is officially closed. Arrange with the TA for the late submission of the report. Please reach out to instructor or your TA to request extra time for late submissions.

COVID-19 Impact on Attendance

While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please communicate with your TA or with the instructor to get excused from the meetings. The letter or email from the DOS office will serve as an excuse for absence. LAB REPORTS SUBMISSION IS REQUIRED even for excused absences. Use the video demonstrations and finish your lab reports, reach out to your TA, and ask for extra time.

If you are experiencing any symptoms of COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your health, and those of others in the community, is more important. During the quarantine period, the students can finish the labs online and submit the reports for full points. The message from the Dean of Students will serve as an excuse note. So please reach out to the UNT hotline and report your absence related to COVID exposure.

Class Materials for Remote Instruction

Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action. Please refer to https://vpaa.unt.edu/return. Additional remote instruction may be necessary if community health conditions change or you need to self-isolate or quarantine due to COVID-19. Students will need access to a [webcam and microphone – faculty member to include what other basic equipment is needed] to participate in fully remote portions of the class. Information on how to be successful in a remote learning environment can be found at https://online.unt.edu/learn.

Statement on Face Covering (not required for online/remote labs)

*Consistent with CDC guidelines and state policy, individuals are not required to wear face coverings on UNT's campuses. Non-vaccinated individuals are strongly encouraged to wear a face covering until further notice. The use of face coverings has proven to reduce the spread of diseases, including COVID-19. All students and faculty are welcome to wear a face covering in class or on campus to protect themselves and others from COVID-19." Individuals may not be able to wear a face-covering due to a disability. Please see the Office of Disability Access guidance on face coverings. Exceptions to the face-covering guidelines, including the use of a face shield in lieu of a face covering when teaching, must be reviewed by the Safety and Incident Management Advisory Team. Submit a Request for Other Exceptions form for consideration. A socially distanced classroom layout has been created for all classrooms and class labs to help faculty create seating charts for in-person classes.

Lab Cleanliness (Not required for online/remote labs)

It is the student's responsibility to keep their working areas clean. After finishing the experiment, please clean the allotted bench-hood space. Also, clean any equipment or glassware utilized during the experiment. The TA's have full authority to remove 2 points from the individual reports for repeated cleanliness issues (related to the experiment). During COVID 19, students are requested to clean the bench surfaces with the sanitizing materials available in the laboratory. Use GLOVES for all cleaning activities. If you have any questions or concerns, do not hesitate to "ASK" your TA for help.

Examination Policy

There are no exams for this course. The grading is based on lab reports and quizzes.

Lab Reports (Assignments) Submission Policy

The details of the weekly module are listed above. The exact due dates for each experiment (module) depends on the lab section. Only PDF and MS word documents are acceptable formats for online and in-person submission, detailed instructions will be provided by the TA of the individual section during the first lab. The TA's will employ Turnitin or similar software for assignment submission. If there is a technical issue or server unavailability, submission dates will be extended as required by the TA. Late assignments will not be accepted. Do not expect any partial credits for late returns unless prearrangement with the TA.

The University is committed to providing a reliable online course system for all users. However, in the event of an unexpected server outage or any unusual technical difficulty which prevents students from completing a time-sensitive assessment activity, the TA will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor or TA and contact the UNT Student Help Desk: helpdesk@unt.edu or 940.565.2324 and obtain a ticket number. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

Class Participation

No classroom participation is listed for this course.

Grade Disputes and Academic Integrity Policy

Reach out to your TA first and resolve the grade disputes. If the dispute is unresolved with your TA, make an appointment to set up the meeting. Give me a week to discuss with your TA, review the details, and understand the quality of the work you turned in for resolving the grade dispute. Cheating is not tolerated and will result in a grade of "F" for the course. Plagiarism is not tolerated and will result in an "F" grade for the course. Both types of behavior will be reported in accordance with UNT policies regarding academic integrity. Identification of academic dishonesty in this class can result in penalties including additional work, a failing grade for the assignment or class, a grade being reduced or changed, and a referral to the Dean of Students. The APA publication manual and material on the UNT Center for Student Rights and Responsibilities webpage (www.unt.edu/csrr) can help you understand and avoid plagiarism. Please communicate in advance with your TA's if you have any questions or concerns regarding the lab reports to avoid plagiarism issues.

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

You will <u>receive a ZERO</u> if any type of plagiarism is found. <u>DO NOT</u> copy lab reports from any other person (including your lab partner) taking the course. The experimental section, results, and conclusions sections could be similar because everyone is doing the same experiment but needs to be written in your own words. In other words, write the report on your own. **DO NOT COPY OR PHOTOCOPY**. Each student must write their unique report, do not print off two copies of the same report, and turn in it for two people, this is considered plagiarism is a very serious offense, do not take it lightly. Receive "ZERO" for any plagiarism and will also have to face other consequences as per the academic integrity policy. Please "ASK" your TA if you are not sure about anything!!!

Instructor Responsibilities and Feedback

The responsibility of the instructor involves setting up the course, syllabus, selecting the experiments, experimental procedure, ensuring the selected experiments fit within the scope of 2370 organic lectures, and ensuring the availability of materials and supplies by working in tandem with the Laboratory supervisor (coordinator). In addition to overseeing the function of labs, the instructor is also responsible for reaching out to teaching assistants (TA's) weekly for understanding the progress and complaints from ongoing labs. The student's concerns and feedback will be discussed during the TA meetings for a productive outcome. You are more than welcome to reach out to the instructor directly at the beginning of the course. However, I would highly recommend everyone to reach out to their laboratory section TA once the course catches momentum. I will be happy to provide any additional instructions for answering prelab and post-lab questions for the lab reports. The instructor is responsible for updating the syllabus changes or course content or grading rules for the entire 3210.001 section. TA's will be responsible for applying these changes to the individual lab sections. Students can expect a response from the instructor in 24 hours during the weekdays, the students can expect their reports and quizzes returned in two weeks after submission.

TA's Responsibilities and Feedback

TA's will conduct the zoom office hour meeting every week covering the online experiments. TA's are responsible for grading and reports.

Syllabus Change Policy

Any unexpected changes in the syllabus due to chemicals unavailability or experimental issues, due dates for quizzes, due dates for lab reports will be immediately updated by the instructor.

UNT Policies

ADA Policy

The University of North Texas makes reasonable academic accommodations for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member before implementation in each class. The faculty in charge of the course will receive the information from the ODA office, the students are not required to deliver the letters to the faculty. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at http://www.unt.edu/oda. You may also contact ODA by phone at (940) 565-4323.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

Retention of Student Records

Student records (lab reports) of this course are maintained in a secure location by the TA of the laboratory section. The grades will be stored by the TA and the instructor on record. The lab report and quiz sheets (with keys) submitted during the duration of the course are kept for at least one calendar year after course completion by the TA's. Course work submitted via the Canvas online system, including grading information, is also stored in a safe electronic environment for one year. Students have the right to view their records; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management, and Retention for additional information.

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the laboratory and the TA/instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classrooms, labs, discussion groups, field trips, etc. Visit UNT's Code of Student Conduct (https://deanofstudents.unt.edu/conduct) to learn more.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail Eagle Connect (https://it.unt.edu/eagleconnect).

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available at the end of the semester to evaluate how this course is taught. The feedback will help the instructor to understand student concerns. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website (http://spot.unt.edu/) or email spot@unt.edu.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence against Women Act) and UNT policies prohibit discrimination based on sex and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off-campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Success in an Online Course

While the online classroom shares many similarities with the face-to-face classroom, success in online education requires certain skills and expectations. Please check the syllabus, course description, course content on Canvas. Understand the assignments, deadlines, report submission methods, and rules regarding late work, absence, and grading policies. Reach out to your instructor or the TA immediately for any questions or concerns during the first week of the semester. The first week of the labs is very important, please make sure you do not miss it. Please check announcements on Canvas. Please refer to "How to Succeed as an Online Student" (https://clear.unt.edu/teaching-resources/online-teaching/succeed-online).

Return to Learning at UNT:

https://vpaa.unt.edu/return

Useful resources and training materials can be found on the <u>Teach Anywhere site</u> or <u>https://classroomsupport.unt.edu/teaching-with-tech.</u>

Highlights relevant to this course

- Classes will start on July 5th. There are no lab lectures, students are not responsible for any quizzes or content on 3220.001 platform.
- This course is 4 weeks the students are required to attend zoom meetings with the TA.
- For the online labs, experiment ppt, word document, experiment demo videos, and zoom recordings are available. TA's will arrange for zoom meetings to discuss the online experiments. These meetings are mandatory!
- Due dates are strictly followed. Please arrange with your TA for late submission of reports or for excuse from zoom meetings. NO reports, NO grades.
- Out of 9 experiments, 4 experiments are performed online.

A COVID hotline has been established to help UNT community members report and understand COVID-19 symptoms, testing information and/or results; receive guidance on actions they may need to take following potential exposure, and with questions related to COVID-19's impact on our university operations. The hotline number is 844-366-5892 and email address is COVID@unt.edu. Please check the latest CDC guidelines and state policy on face mask coverings.

<u>Read the UNT System Guidelines on face coverings</u> for the most current information. To enable faculty to project their voice while teaching an in-person class, faculty may opt to wear a face shield if they can maintain 6 feet of distance from others in the classroom. Face shields are not a substitute for cloth face coverings in slowing the spread of COVID-19, therefore faculty are expected to follow UNT guidelines for face coverings at all times other than when they are teaching in the classroom. <u>Read the UNT System Guidelines on face coverings</u> for the most current

information. If a student is exhibiting COVID-19 symptoms in class, the faculty should politely ask the student to excuse themself from class and return to their place of residence. Refer to the Health Alerts website for self-monitoring information. The student is also asked to contact the COVID Hotline for assistance. Please reach out to your TA or the instructor for any additional questions. (not required for remote/online labs)

Each laboratory section will be overseen by a graduate Teaching Assistant or an Adjunct Assistant, who will instruct the students how to clean their bench areas, hood spaces, and stools (depending on the usage) with disinfectants each day before and after conducting experiments. Supplies of disinfectant (70% isopropyl alcohol or benzalkonium chloride solution), paper towels, and gloves will be maintained in each lab and replenished when the TA or supervising Instructional Lab Coordinator deems necessary. Please check recent update on face covering. Disposable gloves will be provided in all lab courses. Finally, freshly laundered lab coats will be supplied to students each week through a third-party vendor. These are delivered wrapped in plastic and are placed in a collection bin after each lab, to make sure they are not a source of viral spread. Benches will be marked with tape to show allowed student locations consistent with social distancing. Floors will be marked with tape and/or stickers to show where lab stools should be. Unused stools will be removed. When possible and when necessary, the floor will be marked with taped arrows to show the allowed direction of the student movement in the labs, especially for entering/exiting the labs. All inperson experiments are operated at reduced capacity to maintain 6' social distancing. Half of the section will be doing virtual activities remotely each week and the rest meeting face-to-face, on an alternating basis. In the laboratory, there will be only two students on each side of the working bench, with more than 6 feet distance in between. Each student is allotted a hood, most of the supplies required for conducting the experiment will be made available in the hood. Students are requested and required to follow social distancing guidelines while entering, working (interacting with the TA or friends, disposing of chemicals, etc.), and while leaving the labs.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the <u>Electronic Code of Federal Regulations website</u> (http://www.ecfr.gov/). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken online or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to the completion of the class. An online or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course

of study is in a language study program, no online or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an oncampus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an oncampus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email international advising unt.edu) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses (https://policy.unt.edu/policy/07-002).

Use of Student Work

A student owns the copyright for all work (e.g. lab reports, photographs, and presentations, and postings) he or she creates within a class, and the University is not entitled to use any student work without the student's permission unless all of the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- The use of the work does not affect any potential profits from the work.
- The student is not identified.

The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission.

Download the UNT System Permission, Waiver, and Release Form

Transmission and Recording of Student Images in Electronically-Delivered Courses

- 1. No permission is needed from a student for his or her image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
- 2. In the event an instructor records student presentations, he or she must obtain permission from the student using a signed release in order to use the recording for future classes in accordance with the Use of Student-Created Work guidelines above.
- 3. Instructors who video-record their class lectures with the intention of re-using some or all of recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.

Example: This course employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings.

No notification is needed if only audio and slide capture is used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.

Class Recordings & Student Likenesses

Zoom recordings of the lectures and office hour meetings (recordings) will be posted for students enrolled in this class section to refer to throughout the semester. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.

Academic Support & Student Services

Student Support Services

Mental Health

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- Student Health and Wellness Center (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- UNT Care Team (https://studentaffairs.unt.edu/care)
- UNT Psychiatric Services (https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Chosen Names

A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.

- **UNT Records**
- **UNT ID Card**
- **UNT Email Address**
- Legal Name

*UNT euIDs cannot be changed at this time. The collaborating offices are working on a process to make this option accessible to UNT community members.

Pronouns

Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don't assume someone's name, we should also ask and not assume someone's pronouns.

You can add your pronouns to your Canvas account so that they follow your name when posting to discussion boards, submitting assignments, etc.

Below is a list of additional resources regarding pronouns and their usage:

- What are pronouns and why are they important?
- How do I use pronouns?
- How do I share my pronouns?
- How do I ask for another person's pronouns?
- How do I correct myself or others when the wrong pronoun is used?

Additional Student Support Services

- Registrar (https://registrar.unt.edu/registration)
- Financial Aid (https://financialaid.unt.edu/)
- Student Legal Services (https://studentaffairs.unt.edu/student-legal-services)
- Career Center (https://studentaffairs.unt.edu/career-center)
- Multicultural Center (https://edo.unt.edu/multicultural-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- Pride Alliance (https://edo.unt.edu/pridealliance)
- UNT Food Pantry (https://deanofstudents.unt.edu/resources/food-pantry)

Academic Support Services

- Academic Resource Center (https://clear.unt.edu/canvas/student-resources)
- Academic Success Center (https://success.unt.edu/asc)
- UNT Libraries (https://library.unt.edu/)
- Writing Lab (http://writingcenter.unt.edu/)